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10/041,911	01/07/2002	Frank E. Manning	GUID.038US01	4087
51294	7590	05/12/2006	EXAMINER	
HOLLINGSWORTH & FUNK, LLC			FOREMAN, JONATHAN M	
8009 34TH AVE S.			ART UNIT	
SUITE 125			PAPER NUMBER	
MINNEAPOLIS, MN 55425			3736	

DATE MAILED: 05/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/041,911

Applicant(s)

MANNING ET AL.

Examiner

Jonathan ML Foreman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 4/27/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 24-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 24-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 8, 15, 24 – 31, 37 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,638,268 to Niazi in view of U.S. Patent No. 4,586,923 to Gould et al. and U.S. Patent No. 6,408,214 to Williams et al.

In regards to claims 1, 2, 8, 15, 24 – 31, 37 and 42, Niazi a guide catheter including an outer sheath (11) having an open lumen and a pre-shaped distal end (Col. 4, lines 4 – 31); an inner sheath (12) having an open lumen configured to receive a payload, the inner sheath disposed within the open lumen of the outer sheath, the inner sheath being axially rotatably and longitudinally translatable relative to the outer sheath (Col. 3, lines 12 – 15), a distal end of the inner sheath conforming to a shape of the outer sheath when the inner sheath is retracted, and the distal end of the inner sheath assuming a pre-formed shape when the distal end of the inner sheath is extended beyond the distal end of the outer sheath (Col. 3, lines 10 – 23; Col. 4, lines 4 – 8); a steering tendon along the outer sheath, a distal end of the tendon connected to a distal tip of the outer sheath (Col. 3, lines 55 - 61); a guide handle (28) connected to a proximal end of the outer sheath; and a steering mechanism comprising a torque screw (29) pivotably connected to the handle, the steering mechanism connected to a proximal end of the tendon and providing a pulling force on the steering tendon in response to pivoting of the steering mechanism to adjust a shape of the preshaped distal end of the outer sheath (Col. 3, line 61 – Col. 4, line 3). However, Niazi fails to disclose the

steering mechanism comprising a lever. Gould et al. discloses a steerable catheter having a steering mechanism including either a pivoting torque screw (120) or pivoting lever (102). It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the pivotably connected torque screw as disclosed by Niazi with a pivotably connected lever as taught by Gould et al. in that Gould et al. teaches a torque screw and lever as being functionally equivalent and therefore interchangeable (Col. 8, lines 25 – 27). Niazi discloses an occlusion device (21) connected to the distal end of the outer sheath (Col. 3, lines 43 – 46). Niazi discloses the outer sheath having a second lumen, the steering tendon disposed within the second lumen of the outer sheath (Col. 3, lines 55 - 59). Niazi discloses the payload comprising a pacing lead configured for implantation with a coronary sinus or branch vessel (Col. 3, lines 29 – 31). Niazi discloses the payload comprising a guide wire and a lead having a lumen dimensioned to receive the guide wire (Col. 5, lines 57 – 64). The open lumen disclosed by Niazi is capable of receiving a payload comprising an injectable media (Col. 4, lines 56 – 58). Niazi discloses the distal end of the inner sheath assuming a pre-formed shape when the distal end of the inner sheath is extended beyond the distal end of the outer sheath (Col. 3, lines 10 – 23; Col. 4, lines 4 – 8), but fails to disclose the pre-formed shape being different from the shape of the outer sheath. However, Williams et al. discloses a guide catheter wherein the distal end (14) of the inner sheath (10) assumes a pre-formed shape different from the shape of the outer sheath when the distal end of the inner sheath is extended beyond the distal end of the outer sheath (Col. 4, lines 39 - 56). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the inner sheath as disclosed by Niazi to assume a pre-formed shape different from the shape of the outer sheath when the distal end of the inner sheath is extended beyond the distal end of the outer sheath in order to

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allow for a substantial number of two and three-dimensional curvatures to assist in navigating the catheter through the patient's vasculature (Col. 4, lines 56 – 64).

3. Claims 3, 4, 32, 33, 46 – 48 and 52 - 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,638,268 to Niazi in view of U.S. Patent No. 4,586,923 to Gould et al. and U.S. Patent No. 6,408,214 to Williams et al. as applied to claims 1 and 24 above, and further in view of U.S. Patent No. 5,409,469 to Schaerf.

In regards to claims 3, 4, 32, 33, 46 – 48 and 52 - 54, Niazi in view of Gould et al. and Williams et al. fails to disclose a longitudinally disposed pre-stress line extending from the proximal end to the distal end of the outer or inner sheath, or the guide handle comprising separation grips and at least one longitudinally disposed pre-stress line to facilitate separation of the guide handle in at least two sections. However, Schaerf discloses a lead introducer having a longitudinally disposed pre-stress line (63) extending from the proximal end to the distal end (Col. 5, lines 25 – 45). Schaerf discloses the guide handle comprising separation grips (Col. 5, lines 30 – 32) and at least one longitudinally disposed pre-stress line (63) to facilitate separation of the guide handle in at least two sections. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device as disclosed by Niazi in view of Gould et al. and Williams et al. to include pre-stress lines and separation grips as taught by Schaerf to aid in the removal of the sheath without requiring the sheath to be removed from an end of the lead (Col. 5, lines 25 – 29).

4. Claims 5, 6, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,638,268 to Niazi in view of U.S. Patent No. 4,586,923 to Gould et al. and U.S. Patent No. 6,408,214 to Williams et al. as applied to claims 1 and 24 above, and further in view of U.S. Patent Application Publication No. 2001/0039413 to Bowe.

In reference to claims 5, 6, 34 and 35, Niazi in view of Gould et al. and Williams et al. fails to disclose at least one electrode on the distal end of the inner or outer sheath, and an electrical conductor being coupled to the electrode and being disposed within the inner or outer sheath. However, Bowe discloses a guide catheter having at least one electrode on the distal end of the inner sheath and at least one electrical conductor coupled to the at least one electrode, the conductor being disposed within the inner sheath [0046]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device as disclosed by Niazi in view of Gould et al. and Williams et al. to include at least one electrode as taught by Bowe in order to provide energy to the tissue to treat different ailments of the heart. Furthermore, it would have been an obvious engineering design choice to place the electrode as disclosed by Bowe on the outer sheath in that the electrode would perform the same function being placed on the outer sheath as well as the inner sheath.

5. Claims 7, 9, 10, 36, 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,638,268 to Niazi in view of U.S. Patent No. 4,586,923 to Gould et al. and U.S. Patent No. 6,408,214 to Williams et al. as applied to claims 1 and 24 above, and further in view of U.S. Patent No. 6,533,770 to Lepulu et al.

In reference to claims 7, 9, 10, 36, 38 and 39, Niazi in view of Gould et al. and Williams et al. discloses an occlusion device being connected to the pre-shaped distal end of the outer sheath (Col. 3, lines 43 – 46). However, Niazi in view of Gould et al. and Williams et al. fails to disclose an occlusion device being connected to the inner sheath and at least one pressure sensing device connected to the inner or outer sheath. However, Lepulu et al. discloses a guiding member having an occlusion device connected to the distal end of the inner sheath and a pressure sensing device located within the inner sheath (Col. 17, lines 26 – 35). It would have been obvious to one having

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ordinary skill in the art at the time the invention was made to modify the device as disclosed by Niazi in view of Gould et al. and Williams et al. to include an occlusion device and a pressure sensing device as taught by Lepulu et al. in order to further the diagnostic capabilities of the device. Furthermore, placing the occlusion device and the pressure sensing device on the inner or outer sheath is a design consideration within the skill of the art.

6. Claims 11 – 14, 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,638,268 to Niazi in view of U.S. Patent No. 4,586,923 to Gould et al. and U.S. Patent No. 6,408,214 to Williams et al. as applied to claims 1 and 24 above.

In regards to claims 11, 12 and 40, Niazi in view of Gould et al. and Williams et al. discloses the outer sheath having a substantially circular curve proximally adjacent to a strait section, the curve having a bend radius ranging from about 0 degrees to about 180 degrees and a bend radius from about 1 cm to 7 cm. Niazi in view of Gould et al. and Williams et al. discloses the inner sheath having a substantially circular curve proximally adjacent to a strait section, the curve having a bend radius ranging from about 0 degrees to about 150 degrees and a bend radius from about 1 cm to 5 cm (Col. 4, lines 4 – 23). However, Niazi in view of Gould et al. and Williams et al. fails to disclose the tip of the outer sheath having a length of about 1 cm to 5 cm and the tip of the inner sheath having a length of about 0.5 cm to about 4.0 cm. Niazi in view of Gould et al. and Williams et al. teaches that the predetermined shape and size of the curve can be changed to accommodate different heart sizes (Col. 4, lines 25 – 31). It would have been obvious to modify the size and shape of the predetermined curves as needed to accommodate different heart sizes as taught by Niazi in view of Gould et al. and Williams et al..

In reference to claims 13, 14 and 41, Niazi in view of Gould et al. and Williams et al. discloses the tendon being disposed along the outer sheath (Col. 3, lines 55 – 59), but fails to

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disclose the tendon being on outer surface of the sheath or within the open lumen of the sheath.

However, due to the lack of criticality in the specification for the positioning of the steering tendon, it would have been obvious to one having ordinary skill in the art at the time the device was made to position the tendon on the surface or within the interior of the lumen as desired.

7. Claims 43- 45 and 49 - 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,638,268 to Niazi in view of U.S. Patent No. 4,586,923 to Gould et al. and U.S. Patent No. 6,408,214 to Williams et al. as applied to claims 1 and 24 above, and further in view of U.S. Patent No. 5,462,527 to Stevens-Wright et al..

In regards to claims 43 – 45 and 49 – 51, Niazi in view of Gould et al. and Williams et al. disclose a guide catheter including wherein the lever (102) of the steering mechanism comprises a steering handle (104), but fail to disclose the steering handle including a retention mechanism configured to retain the steering handle at a fixed position. However, Stevens-Wright et al. discloses a guide catheter including a steering handle comprising a retention mechanism configured to frictionally lock a steering mechanism at a fixed position (Col. 9, lines 27 – 34). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the steering handle as disclosed by Niazi in view of Gould et al. and Williams et al. to include a retention mechanism as taught by Stevens-Wright et al. in order to maintain a particular bend in the guide catheter (Col. 9, lines 30 – 34).

### ***Response to Arguments***

8. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.



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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan ML Foreman whose telephone number is (571)272-4724. The examiner can normally be reached on Monday - Friday 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571)272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
JMLF

  
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